

**NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR MANAGEMENT**

**New Millennium Building Systems, Inc.
4020 County Road 61
Butler, Indiana 46721**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 033-11151-00072	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Minor Source Operating Permit [326 IAC 2-6.1]
- B.7 NSPS Reporting Requirement

C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Source Modification [326 IAC 2-7-10.5]
- C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]
- C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.6 Permit Revocation [326 IAC 2-1-9]
- C.7 Opacity [326 IAC 5-1]
- C.8 Fugitive Dust Emissions [326 IAC 6-4]
- C.9 Maintenance of Monitoring Equipment [IC 13-14-1-13]

Testing Requirements

- C.10 Performance Testing [326 IAC 3-6] [326 IAC 3-6] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements

- C.11 Compliance Monitoring [326 IAC 2-1.1-11]
- C.12 Monitoring Methods [326 IAC 3]
- C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 Annual Emission Statement [326 IAC 2-6]
- C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

D.1 FACILITY OPERATION CONDITIONS - Joist Lines, Space Heaters and Oven

Emission Limitations and Standards

- D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-4]
- D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.4 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.1.5 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]
- D.1.6 Metal Coil Surface Coating NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart TT]
- D.1.7 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.8 Testing Requirements [326 IAC 2-1.1-11][326 IAC 12, 40 CFR 60.463]
- D.1.9 Volatile Organic Compounds (VOC)
- D.1.10 VOC Emissions

Record Keeping and Reporting Requirements

- D.1.11 Record Keeping Requirements
- D.1.12 Reporting Requirements [326 IAC 12, 40 CFR 60.465]

Quarterly Report

Quarterly Report

Annual Notification

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary welding and surface coating source.

Authorized Individual:	Bert Hollman
Source Address:	4020 County Road 61, Butler, Indiana 46721
Mailing Address:	5133 County Road 69, St. Joe, Indiana 46785
Phone Number:	219 - 337 - 5158
SIC Code:	3441 and 3444
County Location:	Dekalb
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) joist line, known as Joist Line #1, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 8.0 tons of steel per hour.
- (b) One (1) joist line, known as Joist Line #2, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 14.0 tons of steel per hour.
- (c) One (1) joist line, known as Joist Line #3, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (d) One (1) joist line, known as Joist Line #4, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (e) One (1) bridging line, known as Bridging Line, consisting of one (1) MIG welder and one (1) vacuum coater, exhausting to the atmosphere, capacity: 3.0 tons of steel per hour.
- (f) One (1) decking line, known as Decking Line, consisting of one (1) roll coater, exhausting to the atmosphere, capacity: 28.0 tons of steel per hour.
- (g) Thirty (30) natural gas-fired space heaters, exhausted to the atmosphere, rated at 0.20 million British thermal units per hour each.
- (h) One (1) natural gas-fired drying oven, exhausted to stack Oven, rated at 1.0 million British thermal units per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source, as defined in 326 IAC 2-7-1(22). This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

Notwithstanding Condition B.7 the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
- (e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

B.7 NSPS Reporting Requirement

That pursuant to the New Source Performance Standards (NSPS), Part 60.460, Subpart TT, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (c) Actual start-up date (within 15 days after such date); and
- (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit VOC is limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) During the first twelve (12) months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall be less than 249 total tons per year divided by twelve (12) months, which equals 20.75 tons per month.
- (c) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Source Modification [326 IAC 2-7-10.5]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “responsible official” as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to **construct and** operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour this time frame is determined on a case by case basis until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit. The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
- (1) The date, place, and time of sampling or measurements;

- (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - Joist Lines, Space Heaters and Oven

- (a) One (1) joist line, known as Joist Line #1, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 8.0 tons of steel per hour.
- (b) One (1) joist line, known as Joist Line #2, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 14.0 tons of steel per hour.
- (c) One (1) joist line, known as Joist Line #3, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (d) One (1) joist line, known as Joist Line #4, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (e) One (1) bridging line, known as Bridging Line, consisting of one (1) MIG welder and one (1) vacuum coater, exhausting to the atmosphere, capacity: 3.0 tons of steel per hour.
- (f) One (1) decking line, known as Decking Line, consisting of one (1) roll coater, exhausting to the atmosphere, capacity: 28.0 tons of steel per hour.
- (g) Thirty (30) natural gas-fired space heaters, exhausted to the atmosphere, rated at 0.20 million British thermal units per hour each.
- (h) One (1) natural gas-fired drying oven, exhausted to stack Oven, rated at 1.0 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitation and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the Joist Line #1 Welder through the Joist Line #4 Welder and the Bridging Line Welder, shall not exceed the allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

- (1) for a process weight rate (P) for the Joist Line #1 Welder of 8.0 tons per hour the allowable PM emission rate is 16.5 pounds per hour,
- (2) for a process weight rate (P) for the Joist Line #2 Welder of 14.0 tons per hour the allowable PM emission rate is 24.0 pounds per hour,
- (3) for a process weight rate (P) for the Joist Line #3 Welder of 10.0 tons per hour the allowable PM emission rate is 19.2 pounds per hour,
- (4) for a process weight rate (P) for the Joist Line #4 Welder of 10.0 tons per hour the allowable PM emission rate is 19.2 pounds per hour; and
- (5) for a process weight rate (P) for the Bridging Line Welder of 3.0 tons per hour the allowable PM emission rate is 8.56 pounds per hour.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-4]

Pursuant to 326 IAC 8-2-4 (Coil Coating Operations), the volatile organic compound (VOC) content of coatings applied to any flat metal sheets or strips that are delivered in rolls or coils shall be limited to 2.6 pounds VOC per gallon of coating less water delivered to the applicator.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coatings Operations), the VOC content of coating delivered to the applicator shall be limited to 3.5 pounds of VOCs per gallon of coating less water for forced warm air dried coatings.
- (b) That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.4 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) VOC applied to the Joist Line #1 Dip Coater through Joist Line #4 Dip Coater, the Bridging Line Vacuum Coater and the Decking Line Roll Coater shall not exceed a total of 250 tons per twelve (12) consecutive month period including coatings, dilution solvents, and cleaning solvents.. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per twelve (12) consecutive month period, year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.
- (b) During the first twelve (12) months of operation, the input VOC usage shall be limited such that the total usage divided by the accumulated months of operation shall be less than 250 total tons per year divided by twelve (12) months, which equals 20.83 tons per month.

D.1.5 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart TT.

D.1.6 Metal Coil Surface Coating NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart TT]

This facility is subject to 40 CFR 63, Subpart TT, which is incorporated by reference in 326 IAC 12-1-1. A copy of the rule is attached. The owner or operator of the Decking Line shall not caused any VOC discharged into the atmosphere of more than 0.28 kilogram VOC per liter (2.3 pounds per gallon) of coating solids applied for each calendar month.

D.1.7 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-1.1-11][326 IAC 12, 40 CFR 60.463]

- (a) The Permittee shall conduct an initial performance test as required under 40 CFR 60.8(a) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start up of such facility and such other times as maybe required by the Administrator under section 114 of the Act and thereafter a performance test for each calender month for each affected facility according to the procedures in this section.
- (b) 40 CFR 60.8(d) and (f) do not apply to the performance test.
- (c) The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coatings or by an analysis of each coating, as received using reference Method 24. The Administrator may require the owner or operator who uses formulations data supplied by the manufacturer of the coatings to determine the VOC content of coating using Reference Method 24, or an equivalent or an alternative method.
- (d) The Permittee shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kg/l of coating solids applied.
 - (1) Calculate the volume-weighted average of the total mass of VOC's per unit volume of coating applied (G) during each calendar month for each affected facility using equations in 40 CFR 60.463(c)(1)(i)(A), (B), and (C).
 - (2) The owner shall use the following procedure for determining monthly volume-weighted average emission of VOC's in kg/l of coating solids as applied:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj} \quad \text{Equation 1}$$

Where:

M_o = Mass of VOC's in coatings consumed, as received in kilogram (kg)

M_d = Mass of VOC-solvent added to the coatings, in kg

L_c = the volume of each coating consumed, as received in liters

L_d = the volume of each VOC-solvent added to the coatings in liters (l)

W_o = the proportion of VOC's in each coating, as received (fraction by weight)

D_d = density of each VOC-solvent added to the coatings (kg/l)

$\sum L_{dj} D_{dj}$ = will be 0 if no VOC solvent is added to the coatings, as received

n = the number of different coatings used during calendar month, and

m = the number of different VOC solvents added to coatings used during the calendar month.

Calculate the total volume of coating solids used (L_s) in each calendar month for each affected facility by the following equation:

$$L_s = \sum_{i=1}^n V_{si} L_{ci} \quad (\text{equation 2})$$

L_s = total volume of solids used in a calendar month

Calculate the volume weighted average mass of VOCs used per unit volume of coating solids applied (G) during the calendar month of each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s} \quad (\text{equation 3})$$

G = volume weighted average mass of VOC in coatings consumed in a calendar month per unit volume of coating solids applied, kg/l

Calculate the volume weighted average mass of VOC emissions to the atmosphere (N) during the calendar month for each affected facility by the following equation:

$$N = G$$

- (e) If the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to 0.28 kg/l of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.

- (f) If each individual coating used by an affected facility has a VOC content as received that is equal to or less than of 0.28 kg/l solids, (2.3 pounds VOC per gallon solids) the affected facility is in compliance provided no VOCs are added to the coatings during distribution or application and the volume weighted calculations as described in (d) and (e) are not required to demonstrate compliance.

D.1.9 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 VOC Emissions

Compliance with Condition D.1.3 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, D.1.3, and D.1.4 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limits and/or the VOC usage limits established in Conditions D.1.2, D.1.3, and D.1.4.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.6 the Permittee shall maintain at the source, for a period of at least two years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements [326 IAC 12, 40 CFR 60.465]

- (a) A quarterly summary of the information to document compliance with Condition, D.1. 4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

- (b) Where compliance with the numerical limit specified in 40 CFR 60.462(a)(1) is achieved through the use of low VOC content coatings without emission control devices or through the use of higher VOC content coatings in conjunction with emission control devices, each owner or operator subject to the provisions of this subpart shall include in the initial compliance report required by 40 CFR 60.8 the weighted-average of the VOC content of coatings used during a period of one calendar month for each affected facility.
- (c) Following the initial performance test, the Permittee shall identify, record, and submit a written report to IDEM, OAM every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under Condition D.1.6. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to IDEM, OAM semiannually.

Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section
Quarterly Report

Company Name: New Millennium Building Systems, Inc.
Location: 4020 County Road 61, Butler, Indiana 46721
Permit No.: MSOP 033-11151-00072
Source: Joist Line #1 Dip Coater through Joist Line #4 Dip Coater, Bridging Line Vacuum Coater and the Decking Line Roll Coater
Pollutant: VOC
Limit: 20.83 tons/month for the first 12 months of operation

Year: _____

Month	VOC Usage/Emissions (tons/month)

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section
Quarterly Report

Company Name: New Millennium Building Systems, Inc.
Location: 4020 County Road 61, Butler, Indiana 46721
Permit No.: MSOP 033-11151-00072
Source/Facility: Joist Line #1 Dip Coater through Joist Line #4 Dip Coater, Bridging Line Vacuum Coater and the Decking Line Roll Coater
Pollutant: 250 tons of VOC per 12 consecutive months

Year: _____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	This Month	Previous 11 Months	12 Month Total

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	New Millennium Building Systems, Inc.
Address:	4020 County Road 61
City:	Butler, Indiana 46721
Phone #:	219 337-5158
MSOP #:	033-11151-00072

I hereby certify that New Millennium Building Systems, Inc. is

- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that New Millennium Building Systems, Inc. is

- ☐ in compliance with the requirements of MSOP **033-11151-00072**.
- ☐ not in compliance with the requirements of MSOP **033-11151-00072**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: New Millennium Building Systems, Inc.
Source Location: 4020 County Road 61, Butler, Indiana 46721
County: Dekalb
Construction Permit No.: MSOP 033-11151-00072
SIC Code: 3441 and 3444
Permit Reviewer: Paula M. Miano

On August 7, 1999, the Office of Air Management (OAM) had a notice published in the Auburn Evening Star, Auburn, Indiana, stating that New Millennium Building Systems, Inc. had applied for a construction permit to construct and operate a welding and surface coating source with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On August 10, 1999, Mike and Cathy Leonard, submitted comments on the proposed construction permit. The comments and corresponding responses are as follows: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Comment:

Our property is adjacent to the proposed site for New Millennium Building Systems. We have five acres and a home that is almost paid for in full. We moved here approximately twelve years ago. We do not wish to move. Then again, we are not looking forward to living in the middle of an industrial zone. We have SDI, Heidtman Steel, Air Processing, Paragon Steel, and other smaller industries in front of us. The noise, traffic, air pollution, water and drainage problems are already detrimental to the environment.

We read the copy of the application and staff review that was available at the Butler Library. Unfortunately, the report was too technical for us to get any meaningful information from it. Undoubtedly the factory will cause additional noise and air pollution. It could possibly affect our water supply, and will definitely affect drainage of water from our property. The environmental impact of the above mentioned factories, along with the proposed environmental impact of New Millennium Building Systems would virtually make this area unbearable for any homeowners.

We would like to be informed of any future proceedings related to this matter.

We would also like a summary of the information contained in the application and staff review that is not so technical, so we would have the information we need to determine how the operation of this facility would affect our lives and property. Specifically we need to know what type of air pollutants will be emitted, what are the potential health risks involved, and what effect will they have on the environment over time.

Response:

The OAM thanks Mike and Cathy Leonard for their comments regarding New Millennium Building Systems. This Minor Source Operating Permit contains conditions that will ensure that New Millennium Building Systems remains in compliance with all applicable State and Federal air regulations. The IDEM inspector assigned to this source is Doyle Houser. Mr. Houser can be contacted at 317 233-5674 if you suspect that New Millennium is out of compliance with any of the applicable regulations. IDEM generates a schedule that determines when the inspector will visit the source. Inspector visits are unannounced. There will be enforcement actions if New Millennium Building Systems, Inc. is found to be in violation of any conditions in this Minor Source Operating Permit.

The criteria pollutants that will be emitted from this source include volatile organic compounds (VOC), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO) and particulate matter (PM). The VOC emissions from the coating operation represents the largest source of air pollutants. There will be PM and PM₁₀ (PM with a aerodynamic diameter of less than or equal to ten (10) microns) emissions from the welding operations and minor amounts of SO₂, CO and NO_x emissions from the natural gas combustion. Particulate matter, sulfur dioxide, ozone, and nitrogen oxides are regulated by the National Ambient Air Quality Standards (NAAQS). Particulate matter is defined as Total Suspended Particulates (TSP) and Particulate Matter with size diameters less than or equal to 10 microns (PM₁₀). Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. DeKalb County is currently in attainment with the TSP and PM₁₀ as well as the ozone, nitrogen oxides and sulfur dioxide NAAQS which are health-based standards. A margin of safety is incorporated into the NAAQS levels. The air quality of the region will be continuously monitored from a site at 4500 County Line Road 59 to determine if the PM attainment status is being maintained.

Due to a change in materials proposed to be used at this source the source will not be emitting any hazardous air pollutant (HAPs) above the major source levels. There will be no HAPs emitted from the coating operations. Minor amounts of HAPs will be emitted from the welding operations and natural gas combustion. This proposed modification will emit levels hazardous air pollutant (HAPs) less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act. The 1990 Amendments to the Clean Air Act states that facilities that have the potential to emit single HAPs at the rate of less than 10 tons per year and the combination of HAPs at less than 25 tons per day are considered minor sources under Section 112 of the amendments.

While the proposed air permit does not address traffic or water issues Laurie Gates of the Office of Water Management was contacted regarding your concerns about drainage and water quality. Ms. Gates stated that all new sources situated on sites larger than five (5) acres must apply for a 327 IAC 15-5 permit 180 days prior to construction. This rule requires that the source develop a soil erosion control plan for sediment leaving the site. Pursuant to 327 IAC 15-6 the source must also apply for a permit 180 days prior to operation that requires a storm water pollution prevention plan. The proposed source will not store any materials outside the confines of the building; therefore, contamination of water from storm runoff should not occur. Please address all water concerns to the Office of Water Management inspector for DeKalb County, Cindy Galvin at 317 233-2490 or to Laurie Gates at 317 232-8670. Traffic concerns should be directed to your local transportation office.

On August 27, 1999, David L. Whitmer of DECA, consultant for the applicant, submitted a comment on the proposed construction permit. The comment and corresponding response follows: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is bolded):

Comment:

It has been decided that it will be easier to coat the decking product off the coil and then form the product. In the initial application it was presented that the steel decking would be formed into stampings and then coated. As a result there are two changes in rule applicability. As a result of this change, this facility will be subject to 326 IAC 8-2-4 and to 40 CFR 60 Subpart TT. Since the coating that is proposed for use contains less VOC than either of these standards, this facility will comply with this rule without having to rely on either add-on controls or daily volume-weighted averaging. A copy of Form W-3 (identical to the one submitted in the application) verifies the fact of VOC content.

Response:

As a result of this change in the coating operation the following changes to the proposed permit have been made:

1. Condition D.1.2 has been added to require that the coatings used in on the decking line comply with 326 IAC 8-2-4 as follows and all remaining conditions have been renumbered.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-4]

Pursuant to 326 IAC 8-2-4 (Coil Coating Operations), the volatile organic compound (VOC) content of coatings applied to any flat metal sheets or strips that are delivered in rolls or coils shall be limited to 2.6 pounds VOC per gallon of coating less water delivered to the applicator.

An examination of the MSDS for the material used to coat the coils on the decking line verified that the material complies with the VOC content limitation of this rule.

2. As a result of the changes in the operation 40 CFR Part 60.460, Subpart TT is applicable to the decking line and Conditions B.7, D.1.5 and D.1.6 have been added as follows:

B.7 NSPS Reporting Requirement

That pursuant to the New Source Performance Standards (NSPS), Part 60.460, Subpart TT, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (c) Actual start-up date (within 15 days after such date); and
- (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

D.1.5 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart TT.

D.1.6 Metal Coil Surface Coating NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart TT]

This facility is subject to 40 CFR 63, Subpart TT, which is incorporated by reference in 326 IAC 12-1-1. A copy of the rule is attached. The owner or operator of the Decking Line shall not caused any VOC discharged into the atmosphere of more than 0.28 kilogram VOC per liter (2.3 pounds per gallon) of coating solids applied for each calendar month.

3. As a result of the changes in the operation 40 CFR Part 60.460, Subpart TT is applicable to the decking line Condition D.1.5 (now D.1.8) has been revised to add the performance testing required by this subpart:

D.1.58 Testing Requirements [326 IAC 2-1.1-11][326 IAC 12, 40 CFR 60.463]

- (a) ~~The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~ shall conduct an initial performance test as required under 40 CFR 60.8(a) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start up of such facility and such other times as maybe required by the Administrator under section 114 of the Act and thereafter a performance test for each calender month for each affected facility according to the procedures in this section.
- (b) 40 CFR 60.8(d) and (f) do not apply to the performance test.
- (c) The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coatings or by an analysis of each coating, as received using reference Method 24. The Administrator may require the owner or operator who uses formulations data supplied by the manufacturer of the coatings to determine the VOC content of coating using Reference Method 24, or an equivalent or an alternative method.
- (d) The Permittee shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kg/l of coating solids applied.
- (1) Calculate the volume-weighted average of the total mass of VOC's per unit volume of coating applied (G) during each calendar month for each affected facility using equations in 40 CFR 60.463(c)(1)(i)(A), (B), and (C).

- (2) The owner shall use the following procedure for determining monthly volume-weighted average emission of VOC's in kg/l of coating solids as applied:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj} \quad \text{Equation 1}$$

Where:

M_o = Mass of VOC's in coatings consumed, as received in kilogram (kg)

M_d = Mass of VOC-solvent added to the coatings, in kg

L_c = the volume of each coating consumed, as received in liters

L_d = the volume of each VOC-solvent added to the coatings in liters (l)

W_o = the proportion of VOC's in each coating, as received (fraction by weight)

D_d = density of each VOC-solvent added to the coatings (kg/l)

$\sum L_{dj} D_{dj}$ = will be 0 if no VOC solvent is added to the coatings, as received

n = the number of different coatings used during calendar month, and

m = the number of different VOC solvents added to coatings used during the calendar month.

Calculate the total volume of coating solids used (L_s) in each calendar month for each affected facility by the following equation:

$$L_s = \sum_{i=1}^n V_{si} L_{ci} \quad (\text{equation 2})$$

L_s = total volume of solids used in a calendar month

Calculate the volume weighted average mass of VOCs used per unit volume of coating solids applied (G) during the calendar month of each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s} \quad (\text{equation 3})$$

G = volume weighted average mass of VOC in coatings consumed in a calendar month per unit volume of coating solids applied, kg/l

Calculate the volume weighted average mass of VOC emissions to the atmosphere (N) during the calendar month for each affected facility by the following equation:

$$N=G$$

- (e) **If the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to 0.28 kg/l of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.**
- (f) **If each individual coating used by an affected facility has a VOC content as received that is equal to or less than of 0.28 kg/l solids, (2.3 pounds VOC per gallon solids) the affected facility is in compliance provided no VOCs are added to the coatings during distribution or application and the volume weighted calculations as described in (d) and (e) are not required to demonstrate compliance.**

The Decking Line is in compliance with this NSPS, since the VOC content of all materials as received is equal to or less than of 0.28 kg/l solids, (2.3 pounds VOC per gallon solids) therefore the Decking Line is in compliance provided that no VOCs are added to the coatings during distribution or application.

- 4. As a result of the changes in the operation 40 CFR Part 60.460, Subpart TT is applicable to the decking line Condition D.1.8 (now D.1.11) has been revised to add the record keeping required by the performance testing condition:

D.1.811 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, ~~and~~ D.1.3, **and D.1.4** the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limits and/or the VOC usage limits established in Conditions D.1.2, ~~and~~ D.1.3, **and D.1.4**.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
 - (b) **To document compliance with Condition D.1.6 the Permittee shall maintain at the source, for a period of at least two years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable.**
 - (bc) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- 5. As a result of the changes in the operation 40 CFR Part 60.460, Subpart TT is applicable to the decking line and Condition D.1.9 (now D.1.12) has been revised to add the reporting required by the performance testing condition:

D.1.912 Reporting Requirements [326 IAC 12, 40 CFR 60.465]

- (a)** A quarterly summary of the information to document compliance with Condition, D.1.3 ~~4~~ shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b)** **Where compliance with the numerical limit specified in 40 CFR 60.462(a)(1) is achieved through the use of low VOC content coatings without emission control devices or through the use of higher VOC content coatings in conjunction with emission control devices, each owner or operator subject to the provisions of this subpart shall include in the initial compliance report required by 40 CFR 60.8 the weighted-average of the VOC content of coatings used during a period of one calendar month for each affected facility.**
- (c)** **Following the initial performance test, the Permittee shall identify, record, and submit a written report to IDEM, OAM every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under Condition D.1.6. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to IDEM, OAM semiannually.**

On September 1, 1999, Tim Jones, Environmental Engineer for Vulcraft, submitted comments on the proposed construction permit. The comments and corresponding responses follows: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is bolded):

Comment 1:

IDEM should further consider, and then apply, MACT requirements to New Millennium.

The Technical Support Document (TSD) for the proposed permit indicates that New Millennium will not be a major source of hazardous air pollutants (HAPs). We believe that this is wrong. The TSD identifies several HAP materials that are anticipated to be emitted from the facility in minor amounts. The TSD does not, however, note that the source will have emissions of glycol ethers, substances that are considered to be HAPs under the Clean Air Act.

Although the application supplied by New Millennium states that no glycol ethers will be emitted, we believe this is wrong. The permit indicates that the predominant coating will be Coating SP-9598-1. The MSDS notes that the coating contains Butyl Cellosolve (CAS #111-76-2) at 5.68% by weight and Etasolve EP (CAS #2807-30-9) at 0.81% by weight. With its Emission Statement mailing earlier this year, IDEM supplied sources with a HAP table that included a list of common glycol ethers. Among the materials listed was ethylene glycol monobutyl ether (CAS #111-76-2). In addition, EPA has published a document that identifies compounds regulated as glycol ethers under the Toxic Release Inventory (TRI). The criteria for listing under the TRI are similar to the criteria for listing as a HAP under the Clean Air Act. The TRI document lists both Butyl Cellosolve and Etasolve EP as materials classified as glycol ethers.

On the basis of this information, it is apparent that the proposed facility will be a major source of HAP emissions since it will emit glycol ethers well in excess of ten tons per year. As such, the facility is subject to source-specific maximum achievable control technology (MACT) review under §112(g) of the Clean Air Act. This represents a serious deficiency in the permit review for this facility that must be addressed by IDEM prior to issuance of this permit.

Response 1:

The source has decided to change the coating materials that will be used at this source. The new materials have been verified not to contain glycol ethers, or any other HAPs, and therefore the source will not be a major source of HAPs. Consequently a MACT review under §112(g) of the Clean Air Act is not required. The emission calculation spreadsheet for the coating operation has been revised and is attached as page 2 of 4 of TSD Appendix A. While the use of the new materials results in an increase in potential VOC emissions, the source will still be limited to less than 250 tons of VOC per year. The new materials have been verified to comply with all applicable rules. The VOC content of the new decking line material will still comply with the VOC content requirements of 326 IAC 8-2-4 and NSPS Subpart TT. Summaries of the revised potential to emit and the limited potential emissions are given below:

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	57.9
PM ₁₀	58.0
SO ₂	0.018
VOC	509 900
CO	2.58
NO _x	3.07

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Joist Line #1	11.0	11.0	0.00	59.7 151	0.00	0.00	0.022
Joist Line #2	19.2	19.2	0.00	104 265	0.00	0.00	0.035
Joist Line #3	13.7	13.7	0.00	74.6 189	0.00	0.00	0.026
Joist Line #4	13.7	13.7	0.00	74.6 189	0.00	0.00	0.026
Bridging Line	0.158	0.158	0.00	22.4 56.8	0.00	0.00	0.00
Decking Line Coater	0.00	0.00	0.00	173 48.2	0.00	0.00	0.00
Space Heaters and Drying Oven	0.058	0.233	0.018	0.169	2.58	3.07	0.058
Total Emissions	57.9	58.0	0.018	509 900 (249)	2.58	3.07	0.167

Due to the change to non-HAP coatings and the source-wide VOC limit the source status remains as stated in the original TSD and has been listed below for information only.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	57.9
PM ₁₀	58.0
SO ₂	0.018
VOC	250
CO	3.07
NO _x	2.58
Single HAP	0.082
Combination HAPS	0.167

This new source is not a major stationary source because although the potential VOC emissions are greater than 250 tons per year the source has agreed to a 250 tons of VOC per year limit, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Comment 2:

IDEM should further consider, and then apply, NSPS requirements to New Millennium.

The TSD indicates that there are no New Source Performance Standards (NSPS) applicable to the New Millennium facility. In review of operations at Vulcraft, IDEM determined that standards contained in 40 CFR Part 60, Subpart TT (Standards of Performance for Coil Coaters) were applicable to its decking line. The Vulcraft decking line is similar to that proposed at New Millennium. Vulcraft believes that IDEM should reevaluate the applicability of NSPS Subpart TT to the New Millennium decking line.

Response 2:

As a result of the changes in the operation 40 CFR Part 60.460, Subpart TT is applicable to the decking line and has been added to the permit as stated in the response to the comment submitted by Dave Whitmer, above.

Comment 3:

IDEM should require New Millenium to calculate compliance with any synthetic minor limit on a daily, not monthly, rolling average.

IDEM is proposing to require New Millennium to demonstrate compliance with synthetic limits on VOC emissions from paint usage on a 12-month rolling basis. Vulcraft is required, in its permit, to demonstrate compliance with a similar limit based upon a 365-day rolling average. Vulcraft believes that a 365-day rolling average should be required for any synthetic minor contained in the New Millennium permit.

Response 3:

IDEM has decided that sources can demonstrate compliance with synthetic minor emission limits on a 12-month rolling basis and therefore no change is required.

Comment 4:

IDEM should consider in far more detail whether to require a PSD permit, or limit New Millennium's VOC emissions to 40 tons per year, because New Millennium appears to be part of the Steel Dynamics source and therefore constitutes a modification to a major PSD source.

The permit is currently deficient because its review has not fully considered whether this proposed plant should be considered part of the Steel Dynamics source. Under the applicable rules, these two plants should be considered parts of the same source if:

- (1) they are on contiguous or adjacent properties,

- (2) they are under common control, and
- (3) they belong to a single major industrial grouping or they support each other.

Each of these elements appears to be satisfied here.

First, the plants are adjacent to each other. The New Millennium plant is being built right next to the Steel Dynamics plant.

Second, the plants appear to be under common control. We believe that the people who are the driving force behind Steel Dynamics are the same people who are the driving force behind New Millennium. We believe there will be substantial commonality between officers, directors and shareholders.

Third, the plants will support each other. The design contemplates that steel produced by Steel Dynamics will roll right off the line into New Millennium for joist production. Although its application claims that "New Millennium *may* purchase any or all of its steel from suppliers other than SDI," the reality is that New Millennium will likely obtain 100% of its materials from Steel Dynamics. Clearly, this facility is being designed to be supported by Steel Dynamics, and to provide Steel Dynamics with an output for some of its steel.

The proposed permit has not properly considered these issues, and therefore is deficient.

In light of the significance of these issues, Vulcraft requests a public hearing to further consider and discuss how they should be resolved.

Response 4:

It has been determined by IDEM that New Millennium and Steel Dynamics are two separate sources. They do not have a common owner, Steel Dynamics does not own 51% of New Millennium. The two sources have different SIC codes. The two sources are not located on contiguous properties, they have no common employees or prior permits that consider these two sources one source. New Millennium may purchase any or all of its steel from Steel Dynamics or from suppliers other than Steel Dynamics depending on the market. No material will ever be returned to Steel Dynamics for sale or use. At maximum capacity, New Millennium could consume less than 5% of Steel Dynamic's capacity. There is no contract that ties New Millennium to Steel Dynamics as a support facility. This permit treats New Millennium as a source separate from Steel Dynamics. Therefore no changes have been made.

Upon further review, the OAM has decided to make the following changes to the Minor Source Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Section B

1. B.5 Modification to Permit should not reference B.7; it should have referenced B.6. It has been changed so that the specific condition number is not referenced so the permit reviewer will not have to change it if the conditions were renumbered.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding ~~Condition B.7~~ **the Section B condition entitled “Minor Source Operating Permit”**, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

2. Clarification to when an affidavit must be submitted was added to B.6.

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section. ~~verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.~~
- (1) **If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.**
- (2) **If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.**
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the ~~The Permittee shall receive an~~ Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, **the Permittee shall** and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
- (e) Pursuant to 326 IAC 2-7-4~~(a)(1)(A)(ii)~~ and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months **of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.** ~~after the source becomes subject to Title V. This 12-month period starts at the postmarked submission date of the Affidavit of Construction. If the construction is completed in phases, the 12-month period starts at the postmarked submission date of the Affidavit of Construction that triggers the Title V applicability. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.~~

Section C

3. C.2 (Preventative Maintenance Plan) paragraphs (b) and (c) have been changed to be consistent with the wording in the Part 70 Operating Permits. Paragraph (a) has been revised so that the PMP is prepared immediately after issuance.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) ~~within **ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days)**~~ after issuance of this permit, including the following information on each emissions unit:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

~~If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015~~

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that ~~lack of proper maintenance~~ **failure to implement the Preventive Maintenance Plan** does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.
4. The [] were deleted from around the rule citation in C.3(a) Source Modification.
5. C.4 (Inspection and Entry) in order to clarify confidentiality C.4 has been revised. OAM also determined that subpart (1) and (2) of paragraph (e) were unnecessary, therefore they have been deleted.

C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, **and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such**, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
- (1) ~~The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]~~
- (2) ~~The Permittee, **and** IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]~~
6. In the first sentence of C.6 Permit Revocation, the words ***to construct and*** were bolded and italicized, because this permit may be used to permit operation alone if the equipment was all previously permitted to be constructed.
7. C.7 Opacity has been revised to correctly reflect the rule language.
- C.7 Opacity [326 IAC 5-1]
-
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions **Alternative Opacity Limitations**), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
8. C.10 (Performance Testing) has been revised to specify the locations of applicable procedures and analysis methods for performance testing. The first paragraph has been modified to make it clear that testing for new emissions units must take place 180 days after start-up. Also, the spelling of Permittee was corrected.

C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) **Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval.** All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing ~~methods~~ **any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures** approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the **completion of the testing. An extension may be granted by the Commissioner IDEM, OAM,** if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the ~~Permittee~~ **Permittee** does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

9. C.11 (Compliance Monitoring) has been revised to clarify when compliance monitoring must begin.

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment ~~no more than ninety (90) days after receipt of this permit.~~ **All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.** ~~If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.~~

10. C.12 (Monitoring Methods) has been revised to clarify that the monitoring and testing requirement are located in Section D of the permit.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing **required by Section D** ~~performed to meet the applicable requirements of~~ this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

11. The last sentence of C.13 (d) needs to be deleted because 326 IAC 2-7-16 is not applicable to MSOP.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. ~~In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~

12. C.18 (General Record Keeping Requirements) (c)(4) has been modified to match C.2. Also, (d) has been revised so that record keeping is implemented when operation begins.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;

- (4) Records of preventive maintenance shall be sufficient to demonstrate that ~~improper maintenance~~ **failure to implement the Preventive Maintenance Plan** did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented ~~within ninety (90) days of permit issuance~~ **when operation begins.**
13. C.19 (e) has been revised, because MSOPs do not have Section B - Deviations from Permit Requirements Conditions and Emergency/ Deviation Occurrence Reports; they are not applicable.
- C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
-
- (e) All instances of deviations ~~as described in Section B - Deviations from Permit Requirements Conditions~~ must be clearly identified in such reports. ~~The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~ **A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:**
- (1) **An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or**
- (2) **A malfunction as described in 326 IAC 1-6-2; or**
- (3) **Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.**
- (4) **Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.**
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.**
14. Condition C.20 has been added as follows because MSOP sources are required to submit annual notification; The form to be used for this notification has also been added to the end of the permit.
- C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]
-
- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

Section D

- 15. Emissions Unit Description box has been revised to clarify that descriptive information is not federally enforceable. If something about the description should be enforceable then it needs to be contained in a specific D condition.

emissions unit description

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

- 16. Condition D.1.4 (now D.1.7) has been revised as follows to correct the cite from Section B to Section C.

D.1.47 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section ~~B~~ **C** - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

- 17. The report form required by Condition C.15 is attached as the following page:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	New Millennium Building Systems, Inc.
Address:	4020 County Road 61
City:	Butler, Indiana 46721
Phone #:	219 337-5158
MSOP #:	033-11151-00072

I hereby certify that New Millennium Building Systems, Inc. is

- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that New Millennium Building Systems, Inc. is

- ☐ in compliance with the requirements of MSOP **033-11151-00072**.
- ☐ not in compliance with the requirements of MSOP **033-11151-00072**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: New Millennium Building Systems, Inc.
Source Location: 4020 County Road 61, Butler, Indiana 46721
County: Dekalb
SIC Code: 3441 and 3444
Operation Permit No.: MSOP 033-11151-00072
Permit Reviewer: Paula M. Miano

The Office of Air Management (OAM) has reviewed an application from New Millennium Building Systems, Inc. relating to the construction and operation of a welding and surface coating source.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

- (a) One (1) joist line, known as Joist Line #1, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 8.0 tons of steel per hour.
- (b) One (1) joist line, known as Joist Line #2, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 14.0 tons of steel per hour.
- (c) One (1) joist line, known as Joist Line #3, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (d) One (1) joist line, known as Joist Line #4, consisting of one (1) MIG welder and one (1) dip coater, exhausted to the atmosphere, capacity: 10.0 tons of steel per hour.
- (e) One (1) bridging line, known as Bridging Line, consisting of one (1) MIG welder and one (1) vacuum coater, exhausting to the atmosphere, capacity: 3.0 tons of steel per hour.
- (f) One (1) decking line, known as Decking Line, consisting of one (1) roll coater, exhausting to the atmosphere, capacity: 28.0 tons of steel per hour.
- (g) Thirty (30) natural gas-fired space heaters, exhausted to the atmosphere, rated at 0.20 million British thermal units per hour each.
- (h) One (1) natural gas-fired drying oven, exhausted to stack Oven, rated at 1.0 million British thermal units per hour.

Existing Approvals

There are no existing air approvals for this source.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
Oven	Drying Oven	40.0	18.0	4000	300

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on July 14, 1999.

Emission Calculations

See Appendix A pages 1 through 4 of 4 of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	57.9
PM ₁₀	58.0
SO ₂	0.018
VOC	509
CO	2.58
NO _x	3.07

HAPs	Potential To Emit (tons/year)
Manganese	less than ten
Chromium	less than ten
Benzene	less than ten
Dichlorobenzene	less than ten
Formaldehyde	less than ten
Hexane	less than ten
Toluene	less than ten
Lead	less than ten
Cadmium	less than ten
Nickel	less than ten
TOTAL	less than twenty-five

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Joist Line #1	11.0	11.0	0.00	59.7	0.00	0.00	0.022
Joist Line #2	19.2	19.2	0.00	104	0.00	0.00	0.035
Joist Line #3	13.7	13.7	0.00	74.6	0.00	0.00	0.026
Joist Line #4	13.7	13.7	0.00	74.6	0.00	0.00	0.026
Bridging Line	0.158	0.158	0.00	22.4	0.00	0.00	0.00

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Decking Line Coater	0.00	0.00	0.00	173.	0.00	0.00	0.00
Space Heaters and Drying Oven	0.058	0.233	0.018	0.169	2.58	3.07	0.058
Total Emissions	57.9	58.0	0.018	509 (249)	2.58	3.07	0.167

Note: The total emissions in parentheses reflect the source wide VOC limit of 249 tons per year for the surface coating operations. This limit was taken by the source to avoid major PSD source status.

County Attainment Status

The source is located in Dekalb County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Dekalb County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	57.9
PM ₁₀	58.0
SO ₂	0.018
VOC	250
CO	3.07
NO _x	2.58
Single HAP	0.082
Combination HAPS	0.167

This new source is not a major stationary source because although the potential VOC emissions are greater than 250 tons per year the source has agreed to a 250 tons of VOC per year limit, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of at least one of the criteria pollutant is greater than or equal to 100 tons per year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the Joist Line#1 Welder through the Joist Line #4 Welder and the Bridging Line Welder shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (a) The process weight rate (P) for the Joist Line #1 Welder is 8.0 tons per hour. Using this value in the above equation yields an emission rate 16.5 pounds per hour. The worst case potential PM emission rate from the Joist Line #1 Welder is 2.51 pounds per hour. Therefore, the Joist Line #1 Welder complies with 326 IAC 6-3-2.
- (b) The process weight rate (P) for the Joist Line #2 Welder is 14.0 tons per hour. Using this value in the above equation yields an emission rate 24.0 pounds per hour. The worst case potential PM emission rate from the Joist Line #2 Welder is 4.39 pounds per hour. Therefore, the Joist Line #2 Welder complies with 326 IAC 6-3-2.
- (c) The process weight rate (P) for the Joist Line #3 Welder is 10.0 tons per hour. Using this value in the above equation yields an emission rate 19.2 pounds per hour. The worst case potential PM emission rate from the Joist Line #3 Welder is 3.13 pounds per hour. Therefore, the Joist Line #3 Welder complies with 326 IAC 6-3-2.
- (d) The process weight rate (P) for the Joist Line #4 Welder is 10.0 tons per hour. Using this value in the above equation yields an emission rate 19.2 pounds per hour. The worst case potential PM emission rate from the Joist Line #4 Welder is 3.13 pounds per hour. Therefore, the Joist Line #4 Welder complies with 326 IAC 6-3-2.
- (e) The process weight rate (P) for the Bridging Line Welder is 3.0 tons per hour. Using this value in the above equation yields an emission rate 8.56 pounds per hour. The worst case potential PM emission rate from the Bridging Line Welder is 0.036 pounds per hour. Therefore, the Bridging Line Welder complies with 326 IAC 6-3-2.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the Joist Line#1 Dip Coater through the Joist Line #4 Dip Coater, the Bridging Line Vacuum Coater and the Decking Line Roll Coater shall be limited

to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booths are in compliance with this requirement.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations, pages 1 and 4 of 4, for detailed air toxic calculations.

Conclusion

The construction and operation of this welding and surface coating source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit MSOP 033-11151-00072.

Appendix A: Welding and Thermal Cutting

Page 1 of 4 TSD App A

Company Name: New Millenium Building Systems, Inc.
 Address City IN Zip: 4020 County Road 61, Butler, Indiana 46721
 Permit No./Plt ID: 033-11151-00072
 Reviewer: Paula M. Miano
 Date: July 14, 1999

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Joist Line #1												
Metal Inert Gas (MIG)(ER5154)	1	104		0.0241	0.00003		0.00001	2.506	0.003536	0.000	0.00104	0.005
Joist Line #2												
Metal Inert Gas (MIG)(ER5154)	1	182		0.0241	0.00003		0.00001	4.386	0.006188	0.000	0.00182	0.008
Joist Line #3												
Metal Inert Gas (MIG)(ER5154)	1	130		0.0241	0.00003		0.00001	3.133	0.00442	0.000	0.0013	0.006
Joist Line #4												
Metal Inert Gas (MIG)(ER5154)	1	130		0.0241	0.00003		0.00001	3.133	0.00442	0.000	0.0013	0.006
Bridging Line												
Metal Inert Gas (MIG)(ER5154)	1	1.5		0.0241	0.00003		0.00001	0.036	0.000051	0.000	0.000015	0.000
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
FLAME CUTTING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	0	0	0	0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma	0	0	0					0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								13.19	0.02	0.00	0.01	0.02
Potential Emissions lbs/day								316.67	0.45	0.00	0.13	0.58
Potential Emissions tons/year								57.8	0.082	0.000	0.024	0.106

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

Page 2 of 4 TSD App A

Revised September 23, 1999 for Non-HAP Coatings

Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) (8760 hrs/yr) (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: New Millenium Building Systems, Inc.****Address City IN Zip: 4020 County Road 61, Butler, Indiana 46785****MSOP: 033-11151****Plt ID: 033-00072****Reviewer: Paula M. Miano****Date: July 14, 1999**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

7.0

61.3

Pollutant

Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
				100.0		
	1.9	7.6	0.6	**see below	5.5	84.0
Potential Emission in tons/yr	0.058	0.233	0.018	3.07	0.169	2.58

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Page 4 of 4 TSD App A

Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: New Millenium Building Systems, Inc.****Address City IN Zip: 4020 County Road 61, Butler, Indiana 46785****MSOP: 033-11151****Plt ID: 033-00072****Reviewer: Paula M. Miano****Date: July 14, 1999****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.439E-05	3.679E-05	2.300E-03	5.519E-02	1.042E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.533E-05	3.373E-05	4.292E-05	1.165E-05	6.439E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.